AUSTRALIAN SOCIETY of DENTISTRY for CHILDREN

MEMBER ASSOCIATION OF IADC

NEWSLETTER
MARCH 1983

The Federal President's Column

As of this month, the Public Health Department of the Western Australian Government has withdrawn from training its own dental therapists. The main reason given is that primary school children are covered by preventive dental programmes. Therapist numbers in the future will depend on replacement of personnel wastage and not expansion and finally, because of reduced numbers of therapists required.

The W.A.I.T. programme, I believe, is being modified to accommodate the training of dental therapists for private practice and government service.

It is interesting to note how effectively treatment and preventive services have influenced the actual manpower requirements and provision of dental services to primary school children. Who would have thought that fluoridation of communal water supplies would be so effective in the reduction of dental caries. Furthermore, it would seem that approximately 300 dental therapists can provide and maintain the oral health of 200,000 primary school children in Western Australia. Having said this, 'where do we go from here?. Do we as a profession require the operative auxilliary in private practice?. It would seem to me that with the oversupply of dentists(?) generally in Australia - the answer is no.

The profession periodically should be reviewing the dental needs and dental priorities in children (and adults), e.g. periodontal disease, orthodontics and geriodontics. The profession should be formulating ways and means of providing the best dental service at the cheapest possible cost to the community.

Furthermore, it is important that the profession look at the use of auxilliary personnel particularly, if certain tasks can be delegated to auxilliaries trained specifically in those areas. I believe there is a better case for the dental hygienist in private practice than for the operative auxilliary.

Let's be active in our thoughts and innovative in our actions.

Des G. Kailis

Registered at the G.P.O., Adelaide, South Australia as a periodical. Category 'B'. Registration No. SBG 1718

Federal Secretary's Report

1. Biennial Convention 1984.

Council has decided that the next biennial convention will be held in Sydney. The N.S.W. Branch is planning the Opera House as the venue, and September as the month.

2. A.S.D.C. Archivist.

The federal records are mounting up. Is there a member who would offer to become the Society's Archivist, to store, sort and systematise the records for posterity?

3. Annual Subscriptions.

There are still a number of annual subscriptions outstanding, each individual member, as well as the branch secretaries, have their responsibility in this matter. Please see to it that dues are paid without further delay.

John Brownbill

NOTES FROM THE BRANCHES

N.S.W. Branch

At the Annual General Meeting held in November 1982, the following Office Bearers were elected:-

President:	Dr. John Lockwood
Secretary:	Dr. Alain Middleton
Treasurer:	Dr. Richard Widmer
Committee Person:	Dr. Lorna Mitchell

Meeting dates for 1983 are as follows:

March 15th Tuesday
May 31st Tuesday
July 19th Tuesday
September 20th Tuesday
November 15th Tuesday A.G.M.

All meetings of the Society will be held in the Holme and Sutherland Rooms, Sydney University Union, Sydney.

The Guest Speaker for the meeting held on 15th March, 1983 will be Miss Anne Robinson, Speech Therapist from Westmead Hospital. Miss Robinson's topic will be "Association between Dentistry and Speech Therapy in the Management of Ankyloglossia".

Alain Middleton

Queensland Branch

Our last bimonthly meeting for the year was held at A.D.A. Christensen House on 6th December. Dr.J. Jago presented a paper on Dental Status and Health Attitudes of pregnant women. Compared with Brisbane Data of twelve years ago, dental caries has fallen in prevalence but periodontal disease has not altered so dramatically in this group. Neither have attitudes to dental health or dental attendance patterns altered greatly in this time. This paper raised serious questions about the impact of community dental health education and its effect on mothers own dental health and ultimately for their children also.

John Brown presented a case of an invaginated odontome resulting in a lateral periodontal abscess. The pulp was not involved and the case was treated with Calcium Hydroxide and later R.C.T., finally resulting in a vital root filled tooth.

The University of Queensland Dental School is the venue for our next regular meeting to be held on February 7th, 1983.

Karren Hallett

Victorian Branch

The Branch held its Annual General Meeting on Friday, November 19th, 1982 at the home of Dr.Pam Daniel. The President welcomed twenty-two members and their guests.

A brief business meeting was transacted in which the following were elected Office-Bearers for 1983:

President:	Dr.D.Crack
Vice-Pres:	Dr.F. Clarke
Sec/Treas:	Dr.G. Hinrichsen

The Branch are planning an active programme as a follow-up to the 9th Congress of the International Association of Dentistry for Children.

Dinner meetings will be held in March, May and July. The 6th Annual Convention Day to be held on Friday, September 23rd, will be held in association with the A.D.A. Peninsula Group.

The Peninsula Golf and Country Club has been booked for that occasion. Resident facilities are available at the Golf Club for those attending the Convention and interstate members would be most welcome. The date coincides with both the Melbourne Show Day weekend and the V.F.L.Football Grand Final. The coincidence is intentional so that interstate guests may come and enjoy either of Melbourne's premier events, as well as meet with their colleagues in children's dentistry.

Gordon Hinricksen

W.A.Branch

The A.S.D.C. (W.A.Branch) Prize in Paediatric Dentistry for 1982 has been awarded to Miss Shelley Greenway. The prize is awarded in the final year of the University of W.A. Bachelor of Dental Science course, and this is the second time the prize has been awarded.

The 1983 Programme, which has yet to be finalised, will have an emphasis on practical considerations. Two sessions to this end are planned: The first involving case presentations, the second probably best described as "working with wire". A third topic will be Medical Conditions and Paediatric Dentistry.

Alistair Devlin

S.A. Branch

Our Branch's Committee has been slow 'getting off the ground' this year and consequently our programme for 1983 has yet to be finalized.

In view of the very close proximity of the date for our usual February meeting and that of the I.A.D.C. 9th Congress, it was decided not to hold our meeting in February. Ten of our members went to Melbourne and attended the Congress and this represents a goodly proportion of our membership.

Our thanks and congratulations are extended to the Victorian Branch and the Organising Committee for a very successful conference. I am sure that all those of our members who attended profitted academically, clinically and socially (not necessarily in that order).

I have mentioned previously that the guest speaker at our last meeting in 1982 was Dr. Allen Gale, an Allergist; he recently forwarded to Joe Verco, our president, the abstract of a 'review paper' he is presenting at the 5th Congress of the International Society for Aerosols in Medicine, in Adelaide in 1984. It is entitled "Dental Aerosols - A brief review of the literature." Dr. Gale points out that the potential for infection from aerosols generated in high speed dental techniques is an occupational hazard for the dentist which has tended to be overlooked. Cross-infection due to bacterial aerosols in dental practice has been reported in several recent articles. Other interesting reports reviewed include the aerosol transmission of hepatitis A and B and the efficacy of facemask protection against aerosol hazards. If any member would like a copy of the bibliography of this review, please contact our branch.

John Kibble

The 9th Congress of I.A.D.C. a personal view.

by John Burrow.

Without doubt one can say that the 9th Congress of the International Association of Dentistry for Children, held in Melbourne February 21st-24th was a resounding success.

The choice of the luxury hotel, The Regent, formerly known as the Wentworth, with its excellent facilities made the learning experience of Congress a very sociable experience as well. To see the huge ballroom filled with delegates from around the world for the Opening Ceremony, a stage seating eminent people, both dentists and lay people, including the Governor General of Australia, Sir Ninian Stephen, with a backdrop of the flags of the member countries of I.A.D.C. was, indeed, an awe inspiring occasion. The piano recital by the brilliant young Korean pianist, miss Nym Kim, now a resident of melbourne, will long remain as an exciting memory.

The scientific programme of the week was not overshadowed by the brilliant opening. We were treated to a feast of dental information and knowledge with over 80 papers by both internationally known dental researchers and, perhaps, lesser known local dental practitioners. Probably the worst feature of the scientific programme was the need to make a choice of which lecture to attend. Fortunately, there was no need to miss the contents of the 'missed' lectures, as the whole programme was recorded on tape.

As an Australian it was interesting to hear how the Scandinavian countries have overcome the problems of not having a fluoridated water supply in their preventive programme. To be able to question Professor Goran Koch over a cup of coffee between lectures was a stimulating experience.

To me, the most challenging lecture was that presented by Professor Stephen Moss, who is chairman of Pedodontics at New York University College of Dentistry. Despite the fact that the lecture commenced at 9 a.m. after a previous evening of socialising, I would suggest that there was not one sleepy face in the audience by 9.05 a.m.. My long held beliefs that the quantity of sugar, especially sucrose, in different foods was a major determining factor in its cariogenic potential were shattered. Even small amounts of sugars, both simple and complex, will support bacterial growth and therefore be cariogenic. Professor Moss suggested that our future preventive strategy eill be to establish an eating frequency threshold for each child, with an attempt to modify it by emphasizing hygiene, fluoride therapy and sealants.

This disturbing lecture was a little relieved by listening to Professor Elsdon Storey, the Professor of Child Dental Health in the University of Melbourne, discuss the results of his research into the many natural anticariogenic factors in foods. Casein in both milk and cheese appears to have the potential to produce remineralization of early carious lesions as well as reducing the ability of oral flora to break down refined carbohydrates.

Professor George Davies delivered a masterly lecture on the topic of "Dental Care for Children in Developing Countries". I think we have all made the error of assisting in the supply of complex, sophisticated dental equipment and materials to developing countries where there is no one to use the equipment, no one to maintain it, and the country is in urgent need of help to establish the simplest of preventative measures.

A Symposium titled "Current Concepts of Paediatrics" saw us listening to some of the most eminent medical specialists of Melbourne, with Dr. Aflington Dungey from Toronto effectively tying together the medical and dental aspects of caring for children.

One of the disappointments of the whole Congress was the lack of time to question the lecturers; to me, this raises the question for organizers of such meetings to look carefully at the number of papers presented and the need to allow adequate

time for questions from the audience i.e. audience participation.

A small, but excellent, trade display was physically sited so that delegates could enjoy a cup of coffee between lectures and view the display without the fear of being late for the next lecture. Poster papers were also kept on view during the Congress in this same room.

The social side of the Congress was also most successful and very enjoyable. There was a dignified Reception at the Great Hall of the National Gallery of Victoria on the Monday evening. After a sumptious feast we were addressed by the Director of the Gallery, and then invited to view the Asian Gallery.

Tuesday evening saw us being hosted and entertained in the homes of members of the Victorian branch of A.S.D.C.. This proved to be a wonderful opportunity to get to know some of the overseas visitors to the congress, as well as, Australian participants. What do you say to a Frenchman who doesn't speak English when you don't speak French ? In reality it proved to be a stimulating experience.

I have been assured that all who attended the Banquet in the 19th century Mansion 'Werribee Park' had a great night, and most were at the 9 a.m. lecture to hear one of the 'invited' lecturers, Professor S.Yoshida from Japan, present a paper which made those of us who treat children under general anaesthesia reassess our ideas.

One can only say a humble "thank you" to all those involved in the organization of this Congress, especially the Chairman of the Organising Committee, Dr.Roger Hall, who is now the President Elect of I.A.D.C. and Dr.Kevin Allen, the Chairman of the Scientific Programme Committee.

The Closing Ceremony only seemed to build up the resolve of each one of us to attend the 10th Congress of I.A.D.C. to be held in Costa Rica.

DENTAL CARE FOR CHILDREN IN DEVELOPING COUNTRIES

** (An Abstract of the 'invited' paper delivered at the 9th Congress of I.A.D.C., February, 1983, by Emeritus Professor G.N.Davies.)

The systems of delivering dental services for children in Australia, New Zealand, Denmark and Great Britain were compared and contrasted and from that analysis conclusions were drawn with respect to the establishment and operation of school dental services in developing countries.

The four systems were described and data were presented on the application of preventive measures, socio-economic indicators in relation to expenditure on oral health services both generally and specifically within the dental services for children, the epidemiology of oral disease and demographic trends.

The prevalence of caries is falling in all four countries. The cause is multi-factorial but unrelated to the type of dental service offered. Coupled with a falling birth rate the trend means that in the school dental services there may be too many dentists and auxiliaries doing simple routine tasks for a diminishing number of children at longer intervals of time in under-utilised facilities. School clinics should be converted to become community-based instead of child-based. Systems of systematic school dental care do not necessarily secure a satisfactory level of oral health in adults.

Any system of delivery of health services needs to be adapted to suit the particular social, demographic and epidemiological circumstances of the country concerned.

The 280 million people in 31 least developed countries (LDCs) spend less than $2. per capita yearly from public funds on health. Their economies are burdened by runaway inflation and they are victims of a combination of economic, geographic, political and administrative forces over which they have no control. The personnel and services on which the $2. per year spent are concentrated in only a few areas.

(continued page 6)

cont'd from P.5

More than 200 million have no access to safe water or health care.

Epidemiological data reveal that the prevalence of caries is low but increasing, especially in urban areas, in association with a decreased consumption of traditional starch foods and an increased consumption of sugar. Periodontal disease begins at an early age and progresses rapidly. Necrotizing ulcerative gingivitis, Burkitt's Lymphoma and oral cancer are common. Available resources of dental manpower make it impossible to provide a restorative service to more than 0.5% of people. No L.D.C. has a fluoridation programme.

Dentistry is given a low priority in the planning of health services hence the need to convince Governments that pain and infection from oral disease inhibit the ability to work productively.

The lesson to be learnt from the four developed countries is not to squander limited resources on expensively equipped dental clinics. The emphasis on curative services is inappropriate for developing countries. The concept of the dental health team should be integrated into primary health care with emphasis on the provision of emergency care, relief of pain and well-managed but minimal systematic care for target groups.

Foreign aid which is tied to the supply of sophisticated equipment from donor countries is counter-productive. What is needed is assistance to develop simple, robust, easy-to-service and inexpensive portable equipment.

There should be a close liaison between rural health centres and rural schools to enable health education activities to promote beneficial local custims and facilitate the participation of teachers in the overall health programme.

The appropriate target group is the group with the greatest need. At present the greatest needs are probably relief of pain and infection in adults, the application of preventive measures for children and health education for parents. Facilities for elective oral restorative and rehabilitative care should be provided only when additional resources become available.

Epidemiological studies are necessary to establish base-line data for planning, to monitor changes in prevalence and to indicate whether dental services should be located at schools or community health centres.

Dental manpower policy should be based upon a core of dentists, preferably with a specialized training in public health dentistry, and a system of career training, beginning at an elementary level for teachers and health personnel who will provide dental first aid and instruction in health centres on prevention. Provision should then be made for auxiliaries to receive further appropriate training as members of oral health teams under the supervision and control of dentists.

(** This Abstract has been prepared by Professor Davies and it is included in the Newsletter with the approval of the Editor of the I.A.D.C. Journal. It is anticipated that a more extensive version of this, and some of the other papers presented at Congress will be published in the I.A.D.C. Journal.

Editor.)

The production of this Newsletter has been assisted by Colgate Palmolive Pty. Ltd.

Letters to the Editor

Dear Sir,
I think there is an error in the Federal President's Column in the December 1982 issue of the Newsletter. He states that "99.9% of children aged less than 3 years had visited the dentist, 82.8% of persons aged 2-14 years attended the dentist once a year and only 44.1% of persons aged 15 years and over attends the dentist once a year".

Des Kailis seems to have misread Australian Bureau of Statistics figures. Both ABS Publications he cites contain a table of the Australian Population for use in calculating rates. He appears to have used the totals in the tables in question as a base, but these are the totals who attended a dentist, not population totals.

I believe the correct interpretation is as follows:

1. 17.3% of children then (i.e. 1979 at time of survey) aged 2-4 years first visited a dentist when less than 3 years old compared with 14.1% then aged 5-9 years. Therefore there would appear to be an increasing proportion of children attending at an earlier age, but nothing like 99.9%.
2. 63.4% of persons aged 2.14 years had attended a dentist within the last 12 months. (which is not the same as attending once a year.) In comparison 43.4% of persons aged 15 years and over attended a dentist within 12 months.

The breakdown by age is as follows:

Age Group	% of each age group attending dentist in last 12 months
2-4	27.4
5-9	72.3
10-14	74.2
2-14	63.4
15-24	57.6
25-44	48.4
45-64	33.6
65 or more	21.5
over 15	43.4

Therefore while a drop off in dental attendance is evident on leaving the School Dental Service, it is also evident that preschool children and the aged (and the disabled) are attending least frequently.

We now know that up to a fifth of preschool children in lower socio-economic groups in Brisbane have 'bottle' caries. The frequent and prolonged use of Vitamin C and other sweet drinks in a bottle was a prime aetiologic agent for these children; the mean period of use was 6-24 months. 43 months was the mean age of dental consultation, when the carious destruction was usually very advanced. Thus we have good reason to advocate that parents should take their children for the first dental consultation when the first tooth erupts, so that sound comprehensive preventive advice can be given to cover diet, oral hygiene and fluoride supplements as appropriate.

I urge all ASDC members to help raise the number of children under 3 when first attending the dentist from 17.3% to 99.9%.

John P. Brown.

Queensland Branch
Professor Kailis replies,

Thank you for the opportunity to read Dr.John Brown's letter. I thank Dr.Brown for his comments and after consultation with him (at the I.A.D.C. Congress) I have reviewed the Australian Burear of Statistics tables and agree his is a better interpretation.

Des Kailis

FROM THE JOURNALS with John Burrow.

DENTAL PRACTICE AND HEPATITIS B.

The basic objective in the procedures proposed for dental practice is to minimize the possibilities of transmission of the disease to dentists,to dental auxiliary staff and to other dental patients being treated in the same physical facilities.It would be unrealistic to suggest that transmission through dental practice can be eliminated entirely,no matter the precautions taken,but it is not unrealistic to believe that its frequency can be greatly reduced.There is,however,an overriding responsibility for the dentist to minimize the risk of transmission to his staff and patients.

During the course of dental treatment carried out using generally accepted techniques,saliva and blood are spread over a wide area.Studies done with saliva stained red have shown that the dentists' and assistants' hands,arms and front of body clothing,all hand instruments,instrument trays,dental units, lights and chairs,x-ray machines,floors, working surfaces,sinks and often radiographs and patient records are contaminated.

Firstly,it is advisable for all dentists to be aware of their own personal status in regard to Hepatitis.It seems reasonable to suggest that all dentists and other dental staff should avail themselves of vaccination against HepB,on a voluntary basis,and it would be convenient to treat HBV carriers consecutively and at the end of a working day.

Personal precautions should include the wearing of gloves,gowns,caps,masks and protective eyeglasses,the thorough handwashing should be carried out with the gloves still on and again after their removal,and should the skin be accidentally penetrated during a procedure,the area should be thoroughly scrubbed and washed under running water and H B I G should be given within 24 hours.

Ultrasonic scalers should not be used and as much disposable equipment as possible should be used.

Sterilization of equipment and working surfaces must be carefully done,staff doing this should wear masks and gloves.

(Main J.H.P. et al J.Canadian Dental Assoc.December 1982. pp756)

GINGIVAL SULCUS DEPTH IN PRIMARY DENTITION

A total of 2,640 measurements were taken in this study involving 44 children to determine the mean and range of the depth of the gingival sulcus in the promary dentition.The children had a meanage of 5 years.They had intact maxillary and mandibular arches,with no missing teeth,mobile teeth,or prefabricated crown restorations.

On the basis of the total number of measurements,the mean depth of the gingival sulcus for the primary dentition is 2.1mm

It is suggested that,in the placement of a prefabricated crown,the depth of the gingival sulcus should be recorded at least four points to avoid impinging the junctional epithelium,

(Kleiner etal J.Pedodontics. 6(4):288 1982)

EARLY AND DELAYED FINISHING OF AMALGAM.

The amount of reaction between mercury and the amalgam alloy determines the deree of "set" and the strength of amalgam restorations.Because some high-copper alloys have strength values at one hour that approach the 24 hour strength of conventional alloys,it seems reasonable to assume that the high-copper alloy restorations can be finished after one hour.

In this study,the amalgam surfaces were finished after 30 minutes and after 24 hours.Three alloys were tested:a conventional lathe-cut alloy,a dispersed phase high-copper alloy,and a spherical particle high-copper alloy.Ten specimens of each were carved and polished with flour of pumice and Amalgloss or Brownie and Greenie cups.and the finishes were photographed with a scanning electron microscope.

At least these two high-copper content amalgam alloys can be polished as soon as 30 minutes after condensation.Regardless of the time lapse before surface finishing,the spherical high-copper alloy Tytin had the best finish and the second best finish was shown by the dispersed phase alloy Dispersalloy.Ths finish of the conventional alloy was not acceptable at 30 minutes.

(Nuckles D.B. et al J. Prosthet Dent. 47(6):612.,1982)

THOUGHT

If you have great talents,industry will improve them;if you have but moderate abilities industry will supply their deficiency.

Sir Joshua Reynolds--Discourses.